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INTERDICTION OF THE SEABORNE TRANSPORTATION
SYSTEM OF NORTH VIETNAM - A STUDY

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INTERDICTION OF THE SEABORNE TRANSPORTATION
SYSTEM OF NORTH VIETNAM - A STUDY

A. FOREIGN TRADE

1. (TS) The foreign trade of the Democratic Republic of Vietnam (DRV), including foreign assistance, provides essential materials for both the economic and the military capabilities of the country, neither of which can be supported by the underdeveloped and agrarian national structure. The extent to which interdiction of the seaborne transportation system can contribute to pressures on the DRV is measured by the importance of this system, considered in conjunction with the possibilities for substitute means of transportation.
2. (S) The economic importance of DRV foreign trade is significantly greater than total tonnages would indicate. DRV industries are dependent on foreign materials such as coke and coking coal, metals, fibers, and replacement parts. Practically all machinery and equipment for new factories is imported. Other imports include grain and other foodstuffs, fertilizer, and general cargo. Probably the most important single import is POL. Annual POL consumption in the DRV has been steadily increasing during the past four years and is currently averaging some 13,000 short tons per month. The armed forces, including military transport, consume some 60 per cent of this amount and government transportation the majority of the remainder.
3. (S) The major export commodity is antracite coal, which is the main source of foreign exchange for the DRV. Other exports include ores, cement, lumber, and live stock.

B. SEABORNE TRAFFIC

4. (S) Seaborne traffic has accounted for over four-fifths of the DRV foreign trade, as indicated by the following short ton shipment statistics for 1964 and 1965.

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<u>METHOD</u>	<u>IMPORTS</u>		<u>EXPORTS</u>	
	<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>
Seaborne (Ocean Shipping)	702,000	547,000	1,722,000	1,755,000
Rail	165,000	330,000	220,000	165,000
Totals	867,000	1,007,000	1,942,000	1,920,000

5. (S) Practically all of the country's seaborne traffic moves through the three northern ports of Haiphong, Hon Gay, and Cam Pha. Haiphong handles almost all seaborne imports (including some 95 per cent of POL, received in bulk tanker shipments) and about 40 per cent of exports. Hon Gay and Cam Pha handle the principal balance of seaborne exports, primarily coal. The estimated [military] unloading capacities of these ports (short tons unloaded in one day of 20 effective working days) are as follows:

<u>PORT</u>	<u>DAILY SHORT TON CAPACITY</u>
HAIPHONG	3,750 1330
HON GAY	1,300 1340
HON GAY COMPLEX	1,624 (2,047 tons at usual base)
CAM PHA	1,300 1340

6. (S) About 40 ships call at Haiphong each month and about 18 and 14 per month respectively at Hon Gay and Cam Pha. Except for the tankers, these ships typically are freighter types of 3,000 to 7,000 gross registered tons. Tankers, almost all of which are Soviet, call at Haiphong at the approximate rate of one per month. None of these ships are of DRV registry. In 1964, the majority (70 per cent) were Free World, but the average Free World shipping for 1965 to date has fallen to 51 per cent.

7. (S) DRV naval bases are located at Port Wallut in the north and Phuc Loi/Ben Thuy and Quang Khe in the south. While these bases normally have no commercial significance, they could be used as minor ports for the handling of coastal traffic or for offloading cargoes moved by lighters from ships anchored offshore.

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C. ATTACK CONSIDERATIONS

8. (TS) Interdictory attack against the seaborne transportation system of the DRV could take the form, alternatively or in combination, of:

- a. Air strikes against port facilities.
- b. Blockade.
- c. Aerial mining of port approaches.

9. (TS) Air strikes to destroy port facilities would be undertaken with the objective of disrupting cargo handling operations through damage or destruction of facilities.

Drawbacks of this course of action include:

- a. Location of port facilities in the vicinity of populated areas. This situation exists primarily at the principal port of Haiphong.
- b. Possibility of damage or destruction, including personnel casualties, of third country shipping in port at the time of the strikes.
- c. Reasonably rapid recuperability; for 30 per cent damage criteria, estimated at 11 days for Hon Gay and Cam Pha and 28 days for Haiphong. Even if normal cargo handling capabilities are not significantly restored, the availability of the sheltered port areas will be retained for loading/unloading operations using lighters and small craft for ship to shore movements.

10. (TS) Plans exist for the establishment of a blockade within the Tonkin Gulf, extending from the DRV/CHINCOM border and encompassing the entire DRV coast. Destroyers, operating in coordination with airborne surveillance units would control shipping from assigned stations, including positions off the approaches to Haiphong, Hon Gay, and Cam Pha. Such a blockade involves substantial forces continuously on station (plus required support forces). Because of the geographic "cul de sac" situation existing in the Tonkin Gulf, blockade operations would be undertaken with some probable risk of overt CHINCOM intervention.

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11. (TS) Existing plans for aerial mining of DRV ports provide a full range of flexibility as to target areas, selection of weapons, and weight of effort. A minimum effort to plant the single first priority field at Haiphong would require 4 A-1 aircraft equivalent sorties over target to deliver 16 mines. A maximum mining effort to cover all planned fields at the three key ports of Haiphong, Hon Gay, and Cam Pha would require 48 sorties/153 mines as an initial effort and 23 sorties/72 mines monthly to sustain the threat. Mining operations would be conducted within the current ROLLING THUNDER framework, with support aircraft requirements and aircraft losses expected to be consistent with experience to date in that program. Mine fields would be planted only within the territorial waters of the DRV and thus would not interfere with free use of the high seas by world shipping. In order to allow a time interval to warn third country shipping to clear or to avoid mined ports, arming delays would be set on all mines in the initial fields. Thus, only those ships choosing to transit the mined areas after the end of the warning period would be endangered.

12. (TS) Comparative evaluation of effectiveness, risks, and matters of policy and political consideration involved in the above attack options favors the selection of aerial mining as the preferred method of interdiction of the seaborne transportation system of the DRV.

D. ALTERNATIVE TRANSPORTATION SYSTEMS

13. (TS) If the DRV were denied the use of its principal ports, seaborne traffic could be diverted to other routes or means of transport. These alternatives, which are available in varying degrees and at added costs and losses in effectiveness, include:

- a. Diversion to other ports.
- b. Railroads.

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c. Highways.

d. Coastal and inland waterways.

14. (TS) The most likely major diversion port is Fort Bayard in Communist China, 840 kilometers by rail from Hanoi. Fort Bayard is a modern port with an estimated unloading capacity of 5,600 short tons per day. Transshipment could be made via railroad, highway, and inland and coastal waterways, within the limits that these systems remained undamaged by US interdictory air attacks. Additionally, to a limited degree, the minor ports of the DRV could be used. However, oceangoing ships cannot enter these ports, and the necessity to use lighterage to and from offshore anchorages would keep the volume of cargo at a low level.

15. (S) The rail line between Hanoi and Kwangsi Province in China could move DRV cargoes from Fort Bayard and other parts of China. Transloading between the Chinese standard gauge and the DRV meter gauge at Ping-hsiang is required. The maximum capacity of this rail line under normal circumstances, provided sufficient rolling stock is available and the capacity of the Hanoi classification yard is utilized almost exclusively for Ping-hsiang - Hanoi traffic, is 3,000 short tons per day. ^{About one third of the capacity is utilized, but capacity also assumes double heading.} This figure does not take into account any interdiction effect.

Prior to current stand-down of ROLLING THUNDER, one point on the line was cut, and the reduced throughput capacity from Ping-hsiang to Hanoi was estimated at 800 short tons per day, attained by using trucks to bypass the interdicted point.

16. (S) Highways could be employed to a limited degree to supplement rail transportation. The roads leading from Communist China are capable of supporting considerable truck traffic; however, gasoline, and spare parts are scarce items and all must be imported.

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17. (S) Coastal waterway transport, using shallow draft motor powered and sail junks, could be used to transship diverted oceangoing cargoes from CHICOM ports to minor ports in the DRV. Junks would not require elaborate port facilities for offloading, but could discharge their cargoes over the beach using indigenous small craft. Necessarily such cargoes would be limited to items which could be handled by these methods, but could include some drummed POL. The import of bulk items and high volume products would be restricted.

18. (S) Inland waterways could provide connections to points in the DRV after transshipment from Communist China by rail, road, or coastal waterway. The primary transshipment point for rail and road traffic would be at Bac Giang on the Song Thai Binh Main Waterway, whence connection could be made via inland waterways to virtually all points in the Red River delta area, including Hanoi.

19 (TS) Continuation and expansion of the fixed target strikes and armed route reconnaissance in the ROLLING THUNDER air campaign to interdict these alternative transportation systems would significantly reduce their capacities to handle cargoes diverted from seaborne traffic.

E. EFFECTS OF MINING CAMPAIGN

20. (TS) A mining campaign against the principal ports of the DRV, coupled with the resumption and continuation of an anti-LOC campaign through sustained strikes against fixed targets and armed route reconnaissance, would have a substantially adverse effect on the movement of essential cargoes into and out of the country. The effect on the DRV economy, transport and military logistics capabilities would be extensive, and the psychological impact of these operations should be felt quite early in the program. The most telling result would be expected in the curtailment of POL supplies. As the interdiction of rail lines forced a heavier load on POL powered land vehicles and waterway craft, the demand for POL would increase. Mining of the DRV ports would virtually cut off the major external sources of POL supply and thus would cause further compounding of the difficulties of foreign

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traffic and internal distribution for the DRV. Interdiction of the port of Haiphong could have the direct effect of reducing the infiltration of supplies by sea to South Vietnam, as there are indications that Haiphong is an embarkation point for such supplies.

21. (TS) There are apparent political problems associated with a mining campaign. Some world-wide reactions would be adverse, and communist propaganda would be expected to amplify these. Mining could provide an excuse for increased support by the USSR to the DRV and China, although supply of materials would be made more difficult by the interdiction. Some countries not now committed to either side might be driven to further isolation; yet others who support the US/GVN effort could be expected to be encouraged by our display of increased determination to attain our objectives. On balance, it can be concluded that if appropriate political, diplomatic, and public information measures are taken, the adverse impact of a mining campaign should be minimized to the point of being acceptable. To the extent that mining, through reduction of the DRV capability to support and supply the Viet Cong, will contribute to diminishing the costs and casualties to US forces directly confronting the Viet Cong, it is important that this action be taken.

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